

Solid matter dosing on a laboratory scale!





Easy dispensing, portioning and filling of even small quantities!

Typical laboratory application

- Continuous or intermittent dosing
- ✓ Volumetric or gravimetric filling
- ✓ pH value control with solid matter
- Inoculation and re-inoculation of crystallisation processes
- ✓ Preparation and processing of samples
- ✓ Integration into handling systems

Available LabDos® Solid technologies

- » Cellular sluice conveyors
- » Screw conveyors
- » Disc feeders
- » Vibration feeders
- » Drum feeders

LabDos® Solid Dosing Devices

The manual addition of solid matter in powder/granulate or crystalline form according to a schedule or the exact filling of a defined quantity is a sensitive procedure. While suitable apparatus is widely available today on a production scale, equivalent devices on a laboratory scale have been hard to find until now.

By dosing with our LabDos® Solid product range you can now automate these operations even on a laboratory scale.

While the flow properties of liquids in general can be easily characterised through their viscosity and flow curves, the conditions for solid matter are considerably more complex. Thus, it is, for example, only possible to an extent to derive the suitability of a particular dosing principle from the angle of pouring, particle shape, pouring density and grain size distribution. Because solid matter can be so different, there will never be one single "solid matter dosing device" which is suitable for all materials.

LabDos® Solid dosing devices are also able to master special tasks such as the dosing of biogenic raw materials or industrial diamonds. In addition to the standard configurations shown below, we will also be happy to construct special solutions in accordance with your specifications.

Gravimetric Dosing Controller

The LabDos®-gm controller provides the functionality required for the operation in gravimetric dosing and filling mode. The dosing tolerance and the maximum speed are adjustable.

The dosing and filling procedure may be triggered using the start button on the operating panel, an external hand or foot switch or via the data interface. The end of a dosing or filling procedure is indicated by an acoustic signal (beep). Should dosing be carried out in excess of the set tolerance, an acoustic error signal is issued (repeated beep).

The actual dosed quantity is shown on the display and can be called up via the data interface.

Scales of the brand Kern or HiTec Zang GraviDos® load cells with a digital measuring amplifier are available.

Interfaces

- > Scale: RS-232, D-Sub9
- > Dosing unit: D-Sub15
- > External hand or foot switch
- Control: RS-232/RS-485



Cellular Sluice Conveyor



NS29-connection, suitable for vacuum

Screw Feeder



Suitable for vacuum and overpressure

Drum Feeder



Dosing tank made from stainless steel or glass

Disc Feeder



Dosing rate range > 2 decades

Gravimetric Screw Feeder



Precise dosing under pressure and in vacuum

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